We claim

1. A process for preparing impact-modified polystyrene which has a melt volume flow ratio MVR of at least 8 $cm^3/10$ min, measured to EN ISO 1133 at a test temperature of 200°C with a nominal load of 5 kg, by anionic polymerization of styrene in the presence of a styrene-butadiene block copolymer, where use is made of an organyl alkali metal compound as anionic polymerization initiator, and of an organyl aluminum compound as retarder.

2. A process as claimed in claim 1, where sec-butyllithium is used as anionic polymerization initiator.

3. A process as claimed in claim 1 or 2, where triisobutylaluminum (TIBA) is used as retarder.

4. A process as claimed in any of claims 1 to 3, where the anionic polymerization is undertaken in the presence of an initiator composition which is obtainable by mixing sec-butyllithium and styrene, and then adding TIBA.

5. A process for preparing thermoplastic molding compositions comprising

   a) from 50 to 99.9% by weight of an anionically polymerized impact-modified polystyrene which is prepared as claimed in any of claims 1 to 4,
   and

   b) from 0.1 to 50% by weight of a rubber-free or impact-modified polystyrene polymerized by an anionic or free-radical route and having a number-average molar mass of not more than 20 000 g/mol, determined by gel permeation chromatography in tetrahydrofuran.

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Application No.: Not Yet Assigned Docket No.: 12810-00038-US

AMENDMENTS TO THE CLAIMS

We claim:

1. (Currently amended) A process for preparing impact-modified polystyrene ~~which has a melt volume flow ratio MVR of at least 8 cm^3/10 min, measured to EN ISO 1133 at a test temperature of 200°C with a nominal load of 5 kg, by~~ comprising anionic polymerization of styrene in the presence of a styrene-butadiene block copolymer, wherein: the process comprises using ~~use is made of~~ an organyl alkali metal compound as an anionic polymerization initiator, and ~~of~~ an organyl aluminum compound as a retarder; and the impact-modified polystyrene has a melt volume flow ratio MVR of at least 8 cm^3/10 min, measured to EN ISO 1133 at a test temperature of 200°C with a nominal load of 5 kg.

2. (Currently Amended) ~~A process as claimed in~~ The process according to claim 1, where sec-butyllithium is used as an anionic polymerization initiator.

3. (Currently Amended) ~~A process as claimed in claim 1 or 2~~ The process according to claim 1, where triisobutylaluminum (TIBA) is used as a retarder.

4. (Currently Amended) ~~A process as claimed in any of claims 1 to 3~~ The process according to claim 1, where the anionic polymerization is undertaken in the presence of an initiator composition which is obtainable by mixing sec-butyllithium and styrene, and then adding TIBA.

5. (Currently Amended) A process for preparing thermoplastic molding compositions, said molding compositions comprising:

a) from 50 to 99.9% by weight of an anionically polymerized impact-modified polystyrene that ~~which~~ is prepared ~~as claimed in any of claims 1 to 4~~ according to claim 1; and

b) from 0.1 to 50% by weight of a rubber-free or impact-modified polystyrene polymerized by an anionic or free-radical route and having a number-average molar mass of not more than 20,000 g/mol, determined by gel permeation chromatography in tetrahydrofuran.

6. (New) The process according to claim 2, where triisobutylaluminum (TIBA) is used as a retarder.

7. (New) The process according to claim 2, where the anionic polymerization is undertaken in the presence of an initiator composition which is obtainable by mixing sec-butyllithium and styrene, and then adding TIBA.

8. (New) The process according to claim 3, where the anionic polymerization is undertaken in the presence of an initiator composition which is obtainable by mixing sec-butyllithium and styrene, and then adding TIBA.